Nova Scotia Department of Natural Resources

Annual Accountability Report for the Fiscal Year 2009-2010

Report DNR 2010-02
July 2010

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1 Accountability Statement

The accountability report of the Department of Natural Resources, for the year ended March 31, 2010, is prepared pursuant to the *Provincial Finance Act* and government policies and guidelines. These authorities require the reporting of outcomes against the department's business plan information for the fiscal year 2009-10. The reporting of departmental outcomes necessarily includes estimates, judgments and opinions by department management and staff.

We acknowledge that this accountability report is the responsibility of the management of the Department of Natural Resources. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the department's business plan for the year.

Original signed by
Minister - John A. M^{ac}Donell

Original signed by
Deputy Minister - Brian Gilbert

2 Message From The Minister

I am pleased to present the Accountability Report of the Department of Natural Resources for 2009-10. This report is a summary of the department's activities during the year that ended on March 31, 2010 and is an opportunity for the department to provide a description of last year's significant accomplishments relative to the commitments that were made in the 2009-10 Business Plan.

One significant highlight from last year was the work done to support the development of a Natural Resources Strategy for the province. During the year, the first phase of the three-phase process to develop the Strategy was completed and the second phase was started. By the end of the year work on Phase 2 was close to being finished. Completion of the Strategy later in 2010 will fulfill one of government's environmental and economic goals included in the *Environmental Goals and Sustainable Prosperity Act*.

I would like to express my appreciation to the staff of Voluntary Planning and the members of the Citizen Engagement Committee for their work during the initial phase. I would also like to thank the many Nova Scotians who participated in the citizen engagement phase by attending meetings and workshops and by providing submissions and comments.

Similarly, the members of the Steering Panel and the members of the Panels of Expertise deserve our thanks for their dedication and expertise provided during the second phase. I am also grateful for the range of thoughts, views and opinions that were provided to the Panels by stakeholders.

Finally, I would like recognize the contributions of staff of the department that support the delivery of departmental programs and the stewardship of our natural resources. Our forests, biodiversity, geological resources, the provincial parks system, and our Crown land base are valued components of the province's natural capital.

I am looking forward to the completion of the Natural Resources Strategy; one that will balance our economic needs with the benefits provided by a healthy natural environment. Although tough decisions will need to be made, now is the opportunity to make changes in how our natural resources are managed in order to achieve the necessary balance that Nova Scotians have asked for.

Sincerely,
Honourable John A. M^{ac}Donell
Minister of Natural Resources

3 Introduction

This document reports on the specific priorities and performance measures that were identified in the department's 2009-10 Business Plan. An electronic version of the plan can be accessed at http://www.gov.ns.ca/natr/businessplan/default.htm. The principal responsibility of the department is the management of natural resources (forests, wildlife, minerals, parks) and Crown lands in the province. When reviewing this document, readers should be aware of several facts that remain relatively consistent from year to year.

First, Nova Scotia has one of the lowest proportions of Crown lands of all provinces and territories, at just over a quarter of the province's land mass. Increasingly high public expectations and numerous competing demands for the use of this limited public land and resource base have created ongoing challenges that the department must address in creative and collaborative ways going forward. Although the province has been acquiring land, the fact remains that a relatively small proportion of this province is publicly owned.

Second, as in previous accountability reports, we have provided a caution that the unpredictability of nature is a continuous influence on departmental operations, that weather patterns and climatic conditions vary greatly from year to year, and that this can have a significant impact on departmental priorities and activities, resources and budgets. Forest fires, insect infestations, wildlife and forest health, park attendance, and the state of departmental infrastructure, such as boardwalks and trails, are all affected by the weather and our climate.

Third, due to the location of the majority of our natural resources, the department has a higher profile in the province's rural areas, and a more rural focus. Resource industries are key contributors to the economic health of the province, particularly in the rural parts of Nova Scotia. There is an ongoing need for the department to heighten public awareness and understanding of the economic importance of our natural resources to both the rural population and the province of Nova Scotia as a whole, and the efforts made by the department to manage our resources in a responsible and sustainable manner.

Fourth, the department is responsible for significant infrastructure, such as parks, trails, fire towers, buildings, vehicles and equipment. It is a continuing challenge to replace and maintain this essential aging infrastructure.

Finally, a process to develop a new strategy governing Nova Scotia's natural resources began in 2007-08. The strategy will include four key components: forests, minerals, parks, and biodiversity (which is the diversity among and within plant and animal species in an ecosystem).

4 Department Progress and Accomplishments

The department's broad, medium-term goals, that were included in the 2009-10 Business Plan, are listed below. These are to:

- increase awareness and understanding of sound natural resources management principles and practices;
- continuously improve departmental strategies for managing natural resources and Crown land;
- improve internal departmental planning processes and management systems; and
- improve the department's work environment and the capacity of staff to deliver departmental programs and services.

The following sections report on accomplishments during 2009-10 for each priority listed under the four individual goals provided in the department's 2009-10 Business Plan.

4.1 Increase Awareness and Understanding of Sound Natural Resources Management Principles and Practices

4.1.1 Stewardship and Outreach

The department has a large amount of technical and science-based information. In order to be good land stewards, it is necessary to continue to review and update this information, distribute it, and have the expertise to interpret it and explain it to others.

During 2009-10 a new provincial parks marketing and promotional "brand" identity was developed and released, to better describe the connection visitors feel with our parks system, the special experiences they enjoy, and the quality and diversity of our Nova Scotian provincial parks system. A new logo and tag line ("Discover our nature") were developed that connects the parks to the community and the people that enjoy the nature based experiences provided by our provincial parks. The new brand is being used on promotional and communication material.

A comprehensive series of mineral potential maps based on mineral occurrence data, past exploration and mining activity and favourable geological environments were completed for the entire province. The maps have already been extensively used as part of the evaluation process for reaching the *Environmental Goals and Sustainable*

Prosperity Act goal of protecting 12% of the province's land mass. The maps are proving to be a very effective tool for facilitating discussion of mineral resource potential on Nova Scotia lands with co-workers in and outside of the department and with stakeholders and the public.

The Association of Nova Scotia Land Surveyors, which oversees all surveyors in the province, undertook a complete review of the *Land Surveyors Act* and Regulations. The Minister of Natural Resources is responsible for the oversight of the Act. An updated *Land Surveyors Act* was drafted and prepared for the spring sitting of the legislature, however a request was made by the Association of Nova Scotia Land Surveyors to delay the introduction of the Act until several concerns that had been raised by a few members of the Association could be addressed. These issues are to be dealt with by the Association and the fall 2010 sitting of the legislature is the expected new target for introduction of the updated Act.

In an effort to communicate to the public the types of programs and services provided by the department, the concept of an "open house" was planned, with the actual event occurring in September 2009. On Friday September 18, 2009, 305 school children, 270 department staff and family members, 45 former department staff, and a few members of the public toured the exhibits and facilities at Shubenacadie. On Saturday September 19, 2009 approximately 2,000 members of the general public attended the department's first ever, full open house.

There were over 40 exhibits and demonstrations, demonstrating natural resource management and programs and services provided by the department. Highlights included helicopter demonstrations, forest fire fighting demonstrations, fire tower simulations, the latest in survey technology, wetland and bug walks, ask the entomologist, 3D aerial photography and scaling demonstrations, insect and mineral identification, gold panning "how to", plus information on parks, mainland moose, the wildlife park, reforestation, the natural resources strategy, careers in natural resources, and the department's vehicle fleet.

Presentations offered throughout the day included the benefits of real Christmas trees, information on ticks, firesmarting your home, winter burning, coastal zone management, and the Parks are for People program.

Participation in a public opinion survey to obtain the level of public satisfaction with the department's performance and the level of awareness of the process used by the department to manage Crown land was not undertaken in 2009-10. With the Natural Resources Strategy process underway throughout the year, participation in a public

opinion survey was deferred, and a decision to participate will be re-visited when the Strategy is completed.

4.2 Continuously Improve Departmental Strategies for Managing Natural Resources

4.2.1 Natural Resources Strategy Development

On May 1, 2007, government announced that work would begin on the development of a comprehensive natural resources strategy covering forests, minerals, parks and biodiversity. This strategy is to determine the priorities and direction for government actions necessary for the management of the resources covered by the strategy and the programs, services and activities related to their management. The ultimate result will be a policy framework that supports sustainable natural resource management, the conservation of a healthy natural environment and current and new economic opportunities linked to these resources.

The natural resources strategy is being prepared using a three-phase approach, with the final strategy expected to be complete in 2010, as specified in the *Environmental Goals and Sustainable Prosperity Act*. In the initial phase, an independent citizen committee appointed through Voluntary Planning (VP) led citizens and stakeholders in discussions to lay the foundation and define the values for a long-term strategy. Information gathered through public engagement was to be used in Phase 2 of the strategy.

VP's final report "The Future of Nova Scotia's Natural Resources: Our Common Ground", was released on April 17, 2009. The report included five key values that Nova Scotians have said they expect to see reflected in the new Natural Resources Strategy. These values are sustainability, diversity, collaboration, transparency, and informed decision making.

The second phase of the process featured a three member Steering Panel that oversaw, at a high level, the Phase 2 consultation process. The Panel Chair, former Chief Justice Constance Glube, was appointed in December 2008. In mid-April 2009 Mr. Joe Marshall, executive director of the Union of Nova Scotia Indians and the Mi'kmaq senior advisor for the Mi'kmaq Rights Initiative, and Mr. Allan Shaw, non-executive chairman of the Shaw Group and a director with the Canadian Centre for Ethics in Public Affairs, were appointed as the remaining two Steering Panel members.

The next step in the process was the creation of four, three-member Panels of Expertise to provide technical expertise during Phase 2. One Panel was to be appointed for each of the four areas to be covered by the Strategy; forests, minerals, parks and biodiversity. The department had received over 60 applications for appointment to the Panels of Expertise in 2008-09. A preliminary screening of all the applications to determine eligibility, using the criteria from the Panels of Expertise's terms of reference, had also been completed in 2008-09.

In 2009-10, the Steering Panel members reviewed the applications and made recommendations to the Minister of Natural Resources on Panel of Expertise membership. Based on these recommendations, the Minister of Natural Resources, in late July 2009, appointed 12 Nova Scotians as technical experts to four separate Panels of Expertise, to analyze technical information and issues concerning their focus area, and consult with technical stakeholders to collect their input.

Once appointed each of the four panels defined the process that they then used to research and define the issues that emerged during the Phase 1 public consultations. The panels conducted research and stakeholder consultation throughout the summer, fall and early winter. Early in 2010, using the information they collected, and taking into consideration the themes that had emerged during Phase 1, the panels prepared draft reports and recommendations that were provided to the Steering Panel.

Although not completed by the end of the year, the final Phase 2 report, which included a separate appendix for each of the four areas covered by the strategy, was provided to the Minister in late April 2010. (The report "A Natural Balance: Working Toward Nova Scotia's Natural Resources Strategy" was released to the public on May 7, 2010). This report, along with the citizen values identified in Phase 1, will form the framework of the actual Natural Resources Strategy, which is to be prepared in Phase 3 before the end of 2010.

Although the preparation of the reports and recommendations of the Steering Panel and the Panels of Expertise was arms-length to the department[1], the department provided considerable support to the Phase 2 process. A departmental staff team oversaw administrative and communication support and provided overall project management to the Phase 2 process. Each Panel of Expertise was supported by a department liaison that had been appointed to provide a research and communications links back to the department. An interdepartmental stakeholder

[1] The process was arms-length to the extent that department staff did not see the Phase 2 report until May 7, 2010; at the same time it was released to the public.

group was formed to provide input to the Phase 2 process via the Panels of Expertise. The department provided funding for independent project management, administrative, editing and writing resources to provide support and skills as needed by the Steering Panel and Panels of Expertise.

Staff also met, both formally and informally, with staff of other several departments, including the coordinators of the other related government strategies underway (Water, Coastal). Several times through the year DNR staff were apprised on the Strategy progress via emails from the Deputy Minister, the department's Strategy Coordinator and the department's internal communications group.

4.2.2 *Environmental Goals and Sustainable Prosperity Act*

The *Environmental Goals and Sustainable Prosperity Act* (EGSPA), passed in April 2007, committed the government to achieving 21 specific environmental and economic goals. Several goals are of particular relevance to the department including:

- develop a comprehensive water-resource management strategy by 2010;
- adopt strategies to ensure the sustainability of the Province's natural capital in the areas of forests, minerals, parks and biodiversity by 2010;
- develop renewable energy sources to meet eighteen and one-half per cent of electricity needs by 2010; and
- legally protect twelve per cent of the total land mass of the Province by 2015.

Preliminary groundwater budgets for primary watersheds were developed and published as an open file illustration, available on the department's website. A centralized spatial database for groundwater information was developed that has already become integral to groundwater research and management in the province. Work is on-going to improve and maintain this database. Many of the groundwater datasets contained in the centralized database have been published on the online interactive groundwater map. This work has helped to provide better understanding of the province's groundwater resources and to provide information needed for an effective water-resource management strategy.

A report from the Colin Stewart Forest Forum, which took five years to prepare, was provided to government in mid-November 2009 and was released to the public on December 22, 2009. This report was a collaborative effort of large forestry companies and environmental organizations and will play an important role in government's efforts to protect 12% of the province's land base by 2015.

Government's approach to achieve this EGSPA commitment includes three main actions:

- designate portions of Crown land
- protect private land with the support of private-land trusts and land owners; and
- undertake land purchases to fill in gaps in provincial protected areas and to reduce the effect of land protection on industrial and other land uses.

An interdepartmental working group of senior staff from DNR and Nova Scotia Environment (NSE) was formed and worked on the development of a protected areas concept plan for meeting the 12% target. The Colin Stewart Forest Forum report recommendations are being considered in the development of the conceptual plan.

Staff also worked with NSE staff to collaboratively review lands identified as the Five Bridges Lake Candidate Wilderness Area. The proposed wilderness area is in the Halifax Regional Municipality between highways 103 and 333. .

The department reviewed and considered offers by several land owners (J.D. Irving, Wagner Forest Products, Neenah Paper) to sell large tracts of land, portions of which would be highly suited for protection and conservation purposes. Proposals and options for acquiring some or all of the land were developed and presented to Cabinet. An offer was sent to JD Irving regarding a portion of their lands for sale.

Working in the capacity of land agent for Nova Scotia Environment, the following lands were acquired as parcels with potential for inclusion in the 12% legally protected lands:

- Tidney Lake, Queens County - 20.25 hectares
- Lake Frederick, Halifax County - 26.0 hectares
- Scotland Creek, Shelburne County - 19.0 hectares
- Cole Harbour, Guysborough County - 20.0 hectares
- North Brookfield, Queens County - 20.8 hectares
- Cape Split, Kings County - 0.57 hectares

The department also worked with the Nova Scotia Nature Trust, the Nature Conservancy of Canada, the Eastern Joint Habitat Venture, and Ducks Unlimited to identify lands for conservation and protection and to work in partnership with these private sector organization to acquire and protect lands. Work was also carried out to extend or renew existing agreements and initiate new agreements with these organizations.

In the fall of 2009 the government established the large land purchase program and allocated more than $75 million for land purchases to help meet the EGSPA 12% land under legal protection target, as well as other provincial goals. The program was led by DNR and included a team made up of representatives from the Office of Aboriginal Affairs, Nova Scotia Environment, Economic and Rural Development, Finance, Office of Policy and Priorities, and various program areas within the department.

More than 60,000 hectares of land were acquired, at an average cost of approximately $1,300 per hectare, through the program. Lands purchased included a number of areas of high conservation values, as identified by the Colin Stewart Forest Forum, lands to help address mitigation issues caused by land protection, lands to help address potential aboriginal interests, and lands to address economic and other priorities of government. Purchases included:

- 22 kilometres of continuous coastline on the Bay of Fundy at Apple Head, Cumberland County, which was the largest piece of privately owned ocean frontage in Nova Scotia;
- a 384 hectare parcel surrounded by the Eigg Mountain-James River Wilderness Area in Antigonish County;
- a 96 hectare parcel of old growth forest near Panuke Lake, Halifax County; and
- a parcel at Kelly's Mountain in Cape Breton which has cultural and heritage significance to the Mi'kmaq and the province.

The department had identified revising the wind energy policy to make the application process more streamlined and the requirements more clearly defined as a planned activity in the 2009-10 Business Plan. This work was put on hold due to the volume of work associated with the large land purchase program.

4.2.3 Climate Change Analysis

During 2009-10 the department participated on the Conference Board of Canada's Leaders' Roundtable on Climate Change Adaptation. The Leaders' Roundtable on Climate Change Adaptation is an independent public–private research and dialogue partnership that brings together senior leaders from a broad range of sectors, including business, government and academia to share insights, suggest joint solutions and inform policy relating to climate change adaptation. Adaptation is an essential response to climate change. Our ability to identify and respond to the physical effects of climate change is dependent on our ability to share and integrate information from multiple sources and types across disciplines.

The primary goal of the Roundtable is to strengthen the capacity of member institutions to act proactively, effectively and in partnership with one another. A secondary goal is to raise broader awareness of the need for climate change adaptation policies. Finally, it is intended that the Roundtable be the definitive voice in identifying adaptation needs, monitoring actions by governments and the private sector, and reporting annually to the public on progress.

The department, through the Conference Board sessions, participated in discussions with other provincial government departments, the private sector and academia concerning how they are taking action to design and implement changes to risk management practices, operations, and policy and planning efforts that may be affected by climate change. Progress and follow-up reports were produced from each discussion / meeting. The network that has been established through the Conference Board sessions has been very beneficial for the development of the Natural Resources Strategy 2010.

The original 'Leaders Roundtable' began to evolve into a new Council on Climate Change Adaptation early in 2010, as participants sought a broader mandate and scope. The new Council is a knowledge-sharing forum for leaders grappling with the challenges of climate change, who are eager to learn from emerging research, experiences and best practices from a variety of sectors, and who wish to influence Canada's adaptation progress. The primary goal of the Council is to strengthen engagement on adaptation and build the capacity of member institutions, and by extension Canada as a whole, to take adaptation actions proactively, effectively and in partnership with each other.

An example of practical climate change related work that took place in the department in 2009-10 was work that identified the areas in the central Antigonish area that are at the highest risk for damage by major storm events and sea level rise. The potential for coastal erosion in the central Antigonish Area was mapped in detail. This information is now available as an easy-to-use map product. A Light Detect and Ranging (or LiDAR) survey of the central Antigonish area was completed. Elevation models created from the LiDAR survey data are being used to assess the potential for flooding due to sea level rise and major storm events. Technical difficulties encountered during collection of the LiDAR survey data have set back completion of the assessment of the coastal flooding potential by approximately four months. The assessment is now scheduled for completion by August 2010.

4.2.4 Forest Industry Transition Support

On October 12, 2007 the Province announced a new program to invest in woodlot silviculture and support a number of other forest-related initiatives so the forest industry in the province can transition to a more stable position. Funding was provided for several initiatives and a Joint Government-Industry Task Force was established to investigate other possible options that could be added to the transition program. During the last year the department delivered five initiatives under the action plan with expenditures related to these initiatives amounting to almost $750,000. These initiatives were funded from the Community Development Trust.

Funding of $300,000 was provided to the Forest Operators Assistance Program in 2009-10 and it completed government's commitment to provide financial support over a three year period beginning in 2007-08. The funding was used to help fund forest road construction,

Funding of $70,000 was provided to the Forest Safety Society for their 2010 operating year. This completed government's commitment to provide financial support over a three year period that began in 2007-08. The funding was used to help fund forestry related safety training programs.

Surplus forestry lands were purchased under the Forestry Transition Program (FTP). The $4 million available under the FTP was completely spent on land from companies such as Ledwidge Lumber; M.R. MacDonald Holdings; Williams Brothers Ltd; Advocate Contracting; and J.D. Irving Limited. The FTP steering committee met regularly and approved the activities required to identify, appraise and purchase the properties.

The Province entered into a funding agreement with the Atlantic Canada Opportunities Agency and Enterprise Cape Breton Corporation that invests in the province's forests and in rural communities. The agreement provides 50/50 cost sharing and a recovery of up to $3.5 million for silvicultural programs in 2009-10 and in 2010-11.

4.2.5 Off-highway Vehicle Program Support

As the lead department for the OHV program file, the Department of Natural Resources is guided by legislation, regulation and policy for matters including safety and training, age restrictions, closed courses, safe vehicle operation and education, OHV enforcement, guiding the development of an OHV trail network and designated trails, secretariat support to the OHV Ministerial Advisory Committee

(OHVMAC), management of the OHV Infrastructure Fund, and leadership of the OHV Action Plan.

The OHV Ministerial Advisory Committee created a Strategic Plan for off-highway vehicles in Nova Scotia and presented it to the Minister. This Strategic Plan is intended to be a continuation of Government's Action Plan on Off-highway Vehicles in NS and to assist government with future work. During this process the OHVMAC has committed to conduct a review of their role and how they function. This will be carried out in 2010-11.

Discussions were facilitated with the OHV Ministerial Advisory Committee and the OHV Interdepartmental Committee on a number of topics including established trails, Crown land access, abandoned rail lines, community consultation, enforcement and OHV plate and permit policies. The department continued to operate the OHV Enforcement Unit throughout the province, which focused specifically on off-highway vehicle related issues.

Substantial effort was spent on the development and maintenance of trails available for OHV use. The department works closely with the Trails Subcommittee of the OHV Ministerial Advisory Committee. A number of trail development and maintenance projects were approved throughout the year. These projects received over $780,000 from the OHV Infrastructure Fund. Staff also worked to resolve community level issues associated with the use of motorized vehicles on trails by visiting those areas and by correspondence through the Minister's Office.

4.3 Improve Internal Departmental Planning Processes and Management Systems

The department continued to work towards improvements in our internal planning systems and in the collection of information needed to make sound decisions for effective operations and for priority setting.

4.3.1 Support for Corporate / Other Government Initiatives

There are a number of government-wide corporate initiatives that the department participates in, as well as several initiatives by other departments that DNR is involved in.

Better Regulation Initiative. This is a government-wide initiative that is intended to make Nova Scotia a more business-friendly location through the reduction and avoidance of red tape, while at the same time ensuring that regulations continue to protect the public, the environment and our communities.

The work being undertaken as part of the Mineral and Petroleum Titles Registry modernization project, which will transform the Registry from a paper-based system to an electronic system, will make it considerable easier for clients to conduct their business. More detail is provided in Section 4.3.2.

The department had also planned a review and revision of various land-related policies to ensure that they meet the requirements of the regulatory management policy and that they provide applicants with a streamlined process and application information. Due to the creation of the large land purchase program in the fall of 2009-10, work on policy revisions was put on hold until 2010-11. Progress in streamlining processes was made throughout the year as work proceeded on the land services renewal program described later in Section 4.3.3.

French-language Services. The *French-language Services Act*, was proclaimed in December 2004. Regulations were also developed that came into effect the end of December 2006. These regulations provide direction to designated public institutions in a number of areas related to the provision of French-language services, providing government information in French, and communicating with the Acadian community and francophones. The main activity throughout the year consisted of the participation of department staff in French-language training arranged through the Office of Acadian Affairs.

Business continuity planning. This is a pro-active planning process used to ensure the continued availability of essential programs and services in the event of a disruption caused by either humans or nature, and to allow a return to normal operations. The department's main business continuity management related work in 2009-10 consisted of the development of an internal process to track the incidence of H1N1 among department staff and putting in place a process to be implemented if the incidence exceeded a certain level in order to continue to deliver the department's key programs and services.

Heritage Strategy implementation. The first provincial heritage strategy was released in February 2008 and provides three directions for the protection, management and development of the province's rich and diverse heritage resources. The directions are: better coordination among those with a responsibility for heritage, sustainable development of heritage resources, and increasing public recognition of heritage.

The department worked on a number of heritage related initiatives throughout the year. The department and Tourism, Culture and Heritage worked on a joint project to develop options to address how to better protect and manage the province's

underwater cultural heritage. Management plans were prepared for three parks with heritage values (Long Lake, Cape Split, and Mira River).

The department was also involved in archeological studies/ research at several sites throughout the province including a multi-year research project to investigate shell middens[2] at Thomas Raddall Provincial Park, ongoing archaeological work at several locations in the Debert area, which are sites of great cultural significance to the Mi'kmaq, and a partnership with the Mi'kmaq to review, develop and define interpretive opportunities on Mi'kmaq heritage in provincial parks.

4.3.2 Mineral and Petroleum Titles Registry Modernization

The Mineral and Petroleum Titles Registry manages the province's mineral tenure management systems. Functions of the Registry include granting licences and leases to mineral rights applicants, keeping records of mineral rights disposition in the province, issuing licences, leases, notifications, releases and other documents related to the province's mineral tenure system and tracking expenditures reported by mineral rights holders.

When completed, the proposed Mineral and Petroleum Rights Registry System (MAPRRS) will provide the department with an integrated solution for management of its mineral and petroleum tenure administration. The new system will provide the department and, in particular Registry staff, with an online map-based interface for viewing and updating mineral and petroleum data. For claim staking, the interface will integrate pertinent land-based information into a map-based interface and offer secure client self-service for online map-based claim staking and online payment, allowing a registered authenticated client to request mineral and petroleum rights from any location, using the internet. Other jurisdictions have, or are in the process of, implementing similar systems.

A contract with an external supplier engaged to work on the project expired on March 31, 2009. A decision was made to complete the remaining system development in-house and supplement an internal team with one or two external programmers. A Statement of Work was prepared to solicit proposals from external suppliers. The Province's Standing Offer was used to procure the services of a local

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[2] Shell middens are places where the debris from eating shellfish and other food has accumulated over time. Information about the past can be discovered when archaeologists excavate these sites, which are dominated by shells.

company to assist the internal team with the technical architecture, system design and programming.

The project was re-initiated in January 2010. By the end of the year the MAPRRS technical environment was established, the functional requirements were consolidated, and the client maintenance system function was built and tested. The client maintenance function was deployed for internal use by Registry staff. Planning for the completion of the system was also underway. Once completed, users will have real-time access to maps and records that were previously available only on paper.

4.3.3 Land Services Renewal Project

This initiative is focused on streamlining Land Services business processes and developing an integrated technology application to support business processes, reduce backlogs and allow staff to work more effectively.

During 2009-10 a project office was established and a program director hired. The following activities were also completed as part of the project initiation effort:

- developed the program organization;
- setup the program environment (e.g. developed documents and procedures; for example: Project Charter, Process Documents, etc.); and
- assigned a project team.

A high-level plan and implementation approach were developed. The implementation approach included the following three stages:

- Stage 1 - Foundation aims to implement high-value/low risk process improvement recommendations, develop a renewal technology roadmap and prepare the Land Services Branch for implementing the technology solution(s).
- Stage 2 - Frameworks focuses on developing detailed system requirements and implementing key technology components of the target Land Services System.
- Stage 3 - Construction concentrates on the development and implementation of a workflow management solution and the integration of this solution with other components of the system that will be implemented in Stage II.

As part of the planning activity, a budget for the program was developed and a TCA request was submitted.

As part of the Foundation stage the following activities were carried out:

- developed a Standard for Operational Records (STOR) for land related records in the custody and control of the Land Services Branch.
- reviewed and enhanced the integrity of the GIS data by developing a data dictionary, standardizing commonly used data elements and manually updating the data.
- dramatically reduced the turnaround time for publishing GIS updates on the Internet from once every three months to twice a month by introducing automated scripts for extracting the data from the source database.
- developed and implemented the Crown Land Information Request (CLIR) Process.
- streamlined, redesigned and implemented the File Administration Process.

As part of developing the renewal technology roadmap, a decision was made to not proceed with the consolidation of databases and the development of a records management solution. The development and implementation of technology would proceed only after the completion of the development of detailed system requirements.

4.4 Improve the Department's Work Environment and the Capacity of Staff to Deliver Programs and Services

4.4.1 Human Resources Strategy

Government's Corporate Human Resources Plan was released in 2005 and covers the period from 2005 to 2010. In support of the corporate plan, the department began five significant human resources related initiatives: wellness, diversity, rewards and recognition, career and succession management, and recruitment and hiring.

Work teams were created in the department to develop and help implement various human resources related initiatives in the areas of recruitment and hiring, rewards and recognition, and career and succession management. Senior management representatives were appointed as champions to lead each work team.

During the year, a departmental diversity committee was established and the committee began work on developing a strategy for the department. In the area of diversity and respectful workplaces, department staff participated in and provided strong representation on the government's diversity round table by providing input into a number of key initiatives. The department increased participation of visible and other minorities through use of the diversity casual hiring pool. Advice,

guidance and mentorship were provided to diversity candidates. Diverse workplace activities were also encouraged and promoted.

5 Financial Results

Financial information is provided in the table shown below based on the department's organizational structure.

Department of Natural Resources Budget Context				
	2009-10			
	Estimate	Actual	Variance	
Program and Service Area	**$'000**	**$'000**	**$'000**	
Senior Management	446	444	(2)	
Corporate Services Unit	4,845	4,235	(610)	
Renewable Resources	16,215	17,584	1,369	
Mineral Resources	3,800	3,909	109	
Regional Services	58,959	60,265	1,306	
Planning Secretariat	5,422	4,998	(424)	
Land Services	3,232	3,169	(63)	
Total - Gross Expenses	92,919	94,604	1,685	
Less: Chargeable to other Depts	1,470	2,230	760	
Total - Program Expenses	91,449	92,374	925	
TCA Purchase Requirements	76,950	78,713	1,763	1
Provincially Funded Staff (FTEs)	842	769	(73)	

Explanation of Variances:

1. Forestry Transition Program TCA of $2.5 million was not included in the Estimate. Also, Parks infrastructure spending was under the Estimate by $640 thousand.

6 Performance Measures

The department has identified a number of performance measures that help track success in meeting our goals. Information on each measure is provided in an appendix to this document. A brief write-up is provided that indicates what each measure tells us, where we are now (2009-10 results), and where we want to be (future target values and target years). The data for each measure is generated within the department.

The department revised its current set of performance measures beginning with the measures that were reported in the 2007-08 Business Plan. There are significantly fewer measures and they are directly aligned with the department's goals, as opposed to the previous set of measures, which were grouped by core business areas.

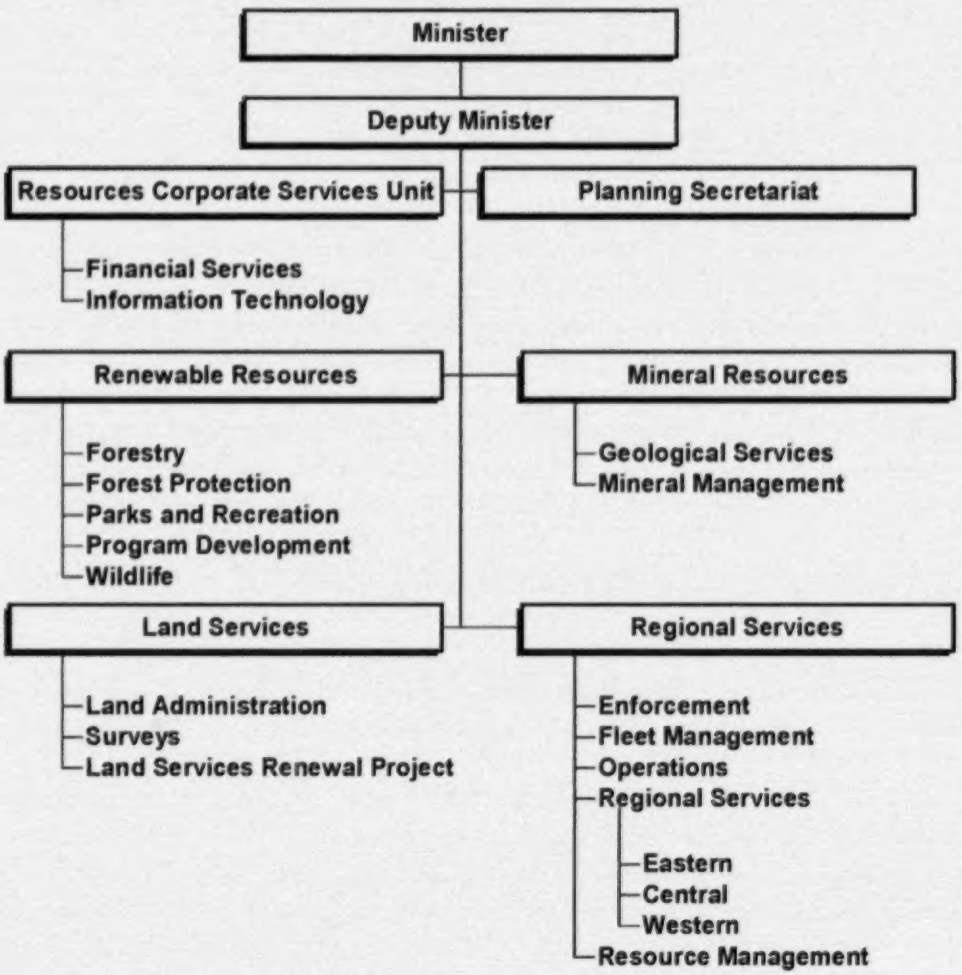
The department recognizes that a more comprehensive performance tracking system is required. When the Natural Resources Strategy 2010 is in place, the department intends to undertake a revamping of our performance measures. This will provide a means of tracking progress in implementing the Strategy and will also provide a way to report on the things that Nova Scotians have identified as being important during the citizen engagement (Phase 1) and stakeholder engagement (Phase 2) phases. This will be done by establishing clearly defined and measurable resource stewardship benchmarks and putting reporting mechanisms in place

7 Supplemental Information

The department has broad responsibilities for the management of forest, mineral, parks and wildlife resources and the management of Crown lands. Nova Scotia's natural resources provide significant economic, social, heritage, cultural and environmental benefits for all Nova Scotians and are one of the province's features that make it an attractive place to live, do business in, and to visit.

The department's organization chart is on the following page. The department consists of five branches, as well as the Resources Corporate Services Unit (RCSU), which provides financial and information technology services to the Department of Natural Resources, several other provincial government departments, and a number of agencies, boards and commissions.

There was one change in the department's organization structure in 2009-10. Part of the department's information technology related responsibilities were transferred to the Chief Information Office.



Appendix 1- 2009-10 Performance Measures

The following pages provide brief explanations of the department's performance measures that were included in the 2009-10 Business Plan. Graphs are also provided for those measures where a graphical presentation of the data is appropriate.

Strategic Goal - Increase Awareness and Understanding of Sound Natural Resources Management Principles and Practices

Outcome - Effective and Efficient Service to the Public

Measure 1 - Level of Public Satisfaction with Overall Performance of the Department
The department periodically includes questions in random public opinion polls to measure Nova Scotians' views on different natural resources related topics. One of these questions asks the public their opinion on the department's overall performance.

What does the measure tell us?
This measure tells us the level of the public's satisfaction with the overall performance of the department. This would cover how well the department is providing the full range of its programs and services.

Where are we now?
The last time the survey was carried out was in 2005-06. At that time, 63% of respondents rated the department's performance as either good or excellent.

The department did not participate in any public opinion surveys with Phase 2 of the Natural Resources Strategy process underway during 2009-10.

Where do we want to be?
We expect that questions related to natural resources will be included in some future public opinion survey once the Natural Resources Strategy has been completed and approved.

Outcome - Public Awareness of Crown Land Management

Measure 2 - Level of Public Awareness of Process in Place to Manage Crown Land
The department periodically includes questions in random public opinion polls to measure Nova Scotians' awareness and understanding of different natural resources related topics. One of these questions asks the public whether they are aware of the department's process that is used to manage Crown land (the Integrated Resource Management, or IRM, planning process).

What does the measure tell us?
This measure tells us the level of the public's awareness of the process that is in use for the management of Crown lands in the province.

Where are we now?
The last survey was carried out in 2005-06. At that time, 61% of respondents knew that there was a process that was being used to manage Crown lands.

The department did not participate in any public opinion surveys with Phase 2 of the Natural Resources Strategy process underway during 2009-10.

Where do we want to be?
We expect that questions related to natural resources will be included in some future public opinion survey once the Natural Resources Strategy has been completed and approved.

Outcome - Knowledgeable Teachers and Youth

Measure 3 - Natural Resources Stewardship Training

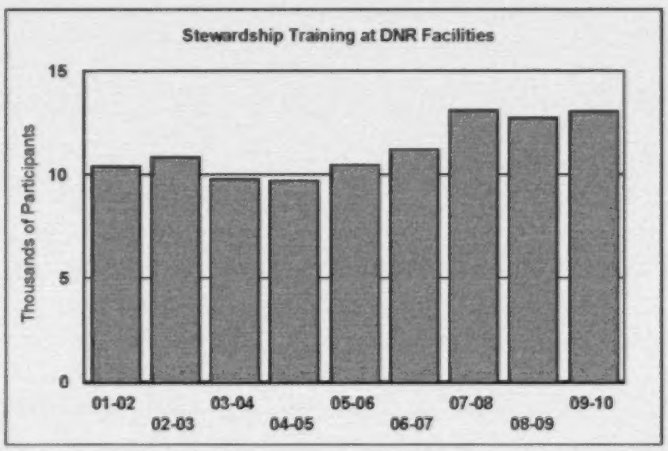
Providing natural resources stewardship training to the public, educators and youth and helping them to understand relevant issues promotes sound natural resources stewardship. It is also important to expose these groups to important stewardship concepts that they may use and pass along to others.

What does the measure tell us?

The measure reflects the number of teachers, adult leaders, students and youth who have participated in one of the natural resources programs at either the Shubenacadie Wildlife Park or the Natural Resources Education Centre (NREC) annually. At the Wildlife Park training is delivered on-site in two classrooms in combination with the captive indigenous wildlife at the Park and is an integral part of the provincial science curriculum. Webfoot (wetlands) education programs through Ducks Unlimited Canada have been added to the complement of nature based education programs offered at the Wildlife Park. The NREC programs involve pre- and post-visit activities as well as interactive activities as part of the visit to the Centre. As a result of the visits and participation in the programs, attendees should gain a heightened understanding of natural resource issues which will contribute to the development of a stewardship ethic.

Where are we now?

During 2009-10, there were 13,035 individuals who participated in training through either the Wildlife Park or the NREC, an increase of 1.9% from the previous year.



Where do we want to be?

The department's target for this measure was 18,000 individuals annually by 2009-10. While a sustained increase in the number of participants is desirable in future years, an increased effort is being placed on reaching teachers, students, youth and youth educators who reside outside of the core service area (which is within a one hour drive of the two facilities) through the provision of distance-learning support, in-service training, and outreach activities. Increased transportation costs are believed to have had a negative impact on the number of visitors to these two facilities, which has resulted in the actual number achieved for 2009-10 falling short of the target, which was originally set in the department's 2005-06 business plan.

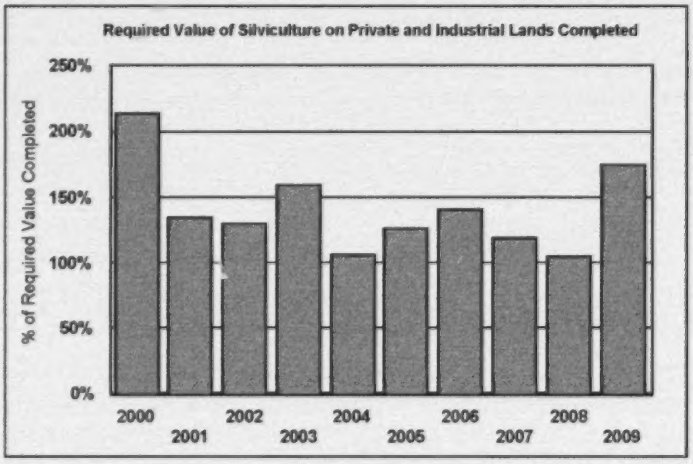
Strategic Goal - Improve Department Strategies for Managing Natural Resources and Crown Land

Outcome - Effective Management of Resource Supply

Measure 4 - Required Value of Silviculture on Private and Industrial Lands Completed
Wood supply sustainability can be managed effectively through an aggressive silviculture program. The department monitors wood harvesting and forecasts long-term wood supply by incorporating both harvesting and silviculture data into the forecast. During the last decade there has been much pressure placed on private woodlots to support the provincial demand for wood. Maintaining an adequate level of silviculture will help to provide for a future supply of wood on private woodlots.

What does this measure tell us?
The measure helps to explain whether the level of silviculture activity being reported by wood buyers exceeds the required amount (as per the requirements of the *Forest Sustainability Regulations*). A ratio of 100% means that the level of silviculture reported equals the amount of silviculture activity required under the *Forest Sustainability Regulations*.

Where are we now?
During the calendar year 2009, approximately 7.6 million silviculture credits were required and about 13.3 million credits were claimed (which included 1.3 million administrative credits). As a result, completed silviculture was 175% of the amount required under the *Forest Sustainability Regulations*.



Where do we want to be?
The department's target for this measure for 2009 was 100% or greater (this measure is calculated on a calendar year basis). As long as this measure exceeds 100%, the amount of actual silviculture work being claimed is greater than the amount which is required (under the *Forest Sustainability Regulations*). Each year the target for this measure will remain at 100% or greater.

Outcome - Species Diversity

Measure 5 - Endangered and Threatened Species with Recovery Plans in Place

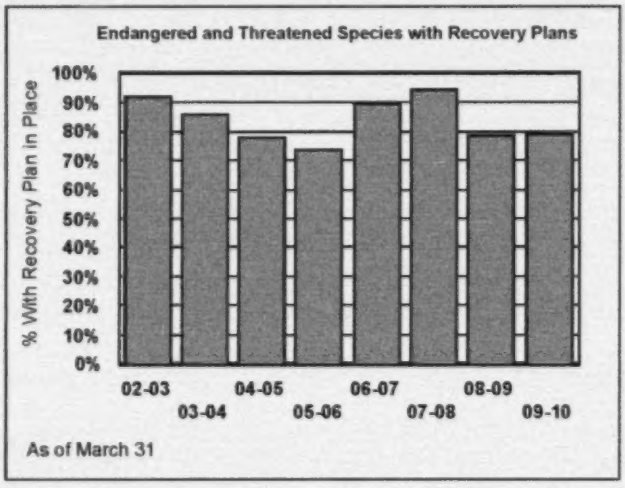
The department is committed to the conservation and protection of species at risk, provincially and nationally, through the *Nova Scotia Endangered Species Act* and the *Accord for the Protection of Species at Risk*.

What does the measure tell us?

The measure is an indicator of how much work is being done to restore the health of endangered and threatened species. Recovery plans are the focal instrument for addressing the recovery needs for species at risk and guide governments, recovery teams and others, in their conservation efforts, and are now being prepared as required by the *Endangered Species Act*. Recovery plans establish, for each endangered and threatened species, what needs to be done, how much it will cost, when it will be done and who will do the work. The plans also set goals for what is required to down-list a species at risk and establish a strategy for attaining these goals. To down-list a species means to move it to a lower risk category. New species are listed periodically under the *Endangered Species Act*. Recovery plans are required to be in place for each endangered species within one year after the species was listed, and within two years for those species listed as being threatened.

Where are we now?

As of March 31, 2010, 24 species were listed as either endangered or threatened. Of these 24 species, all 24 of them were required to have a recovery plan in place by March 31, 2010 and 19 of them, or 79%, did have a recovery plan in place as of that date.



Where do we want to be?

Our annual target is to have required recovery plans in place for all (100%) species listed under the Act. Of the five species without completed plans in place, plan development is being led by Environment Canada for three species. Completion is, in part, dependent on the resources and timelines. Revisions to completed plans are also occurring periodically in order to incorporate new information and knowledge that becomes available.

Outcome - Conservation of Ecosystem Function

Measure 6 - Compliance with the *Wildlife Habitat and Watercourses Protection Regulations*

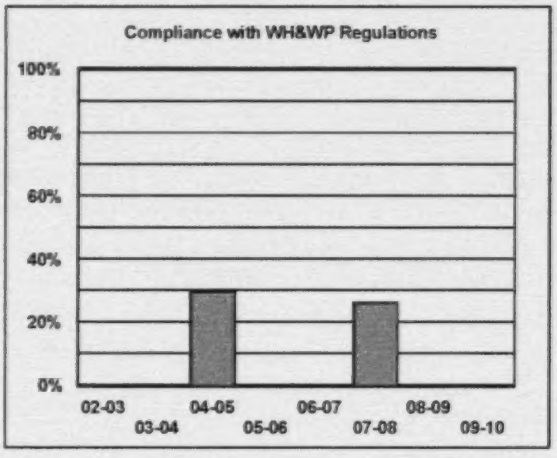
The *Wildlife Habitat and Watercourses Protection Regulations* (under the *Forests Act*) were developed to maintain fish and wildlife habitats and water quality in and near forest harvesting operations on all lands. There are three requirements in the Regulations: reduced harvesting along watercourses in Special Management Zones, clumps of living trees left standing in the harvest site and large pieces of woody debris left evenly scattered over the site.

What does the measure tell us?

The percentage of harvesting operations that meet the legal standards is a measure of how well natural environments are being protected and also a measure of the forest operators' knowledge of the Regulations and their commitment to environmental stewardship. A sample of harvest sites is visited periodically to measure compliance with the Regulations.

Where are we now?

The Regulations became effective on January 14, 2002. Visits to a random sample of sites in 2004-05 (sites harvested shortly after implementation of the regulations) showed 29% in full compliance. The last random monitoring of harvest sites was carried out in 2007-08, with 141 sites done. Results showed that approximately 26% of these sites were in full compliance, which was not significantly different statistically from the 2004-05 results achieved (given the margins of error in the results from each survey).



Harvest sites not in full compliance were often in partial compliance with parts of the Regulations, such the inclusion of legacy clumps or providing special management zones (if required). However full compliance was not achieved for reasons such as the legacy clumps that were left not being large enough or that they included the wrong species of trees, while the special management zones may not have been wide enough.

Where do we want to be?

The target for this measure was 90% compliance by 2010-11. The department will continue its attempts to raise the level of compliance by a combination of educational and enforcement activities.

Strategic Goal - Improve the Department's Work Environment and the Capacity of Staff to Deliver Programs and Services

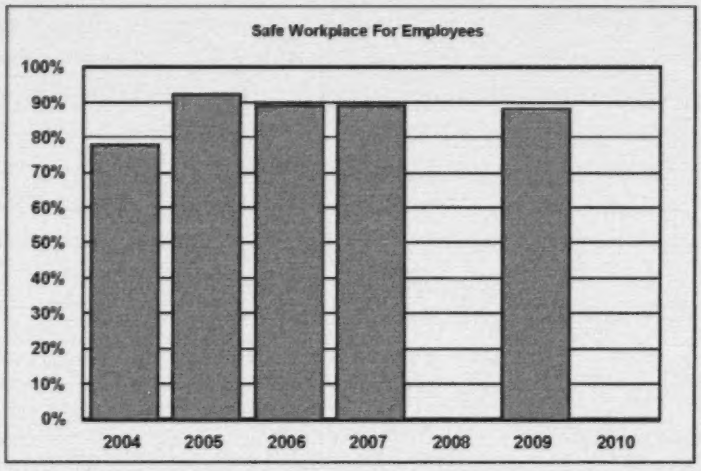
Outcome - Safe Staff and Workplaces

Measure 7 - Percent of Employees That Somewhat Agree or Strongly Agree That The Department Creates a Safe Work Environment

The Public Service Commission surveys employees of the Nova Scotia Government on a regular basis. One of the questions in the How's Work Going survey asks whether the department creates a safe work environment for its employees.

What does the measure tell us?
This measure reports the estimated percentage of the department's employees (based on the survey results) that gave a favourable response to the question (either they somewhat agreed or they strongly agreed that the department provides a safe work environment for its employees).

Where are we now?
The latest survey was administered in March 2009 (no survey was done in 2008 or 2010). The department's result for this question, from the 2009 survey, was 88%, down one percentage point from the 89% achieved in the March 2007 survey. The 88% result was six percentage points higher than the 82% achieved corporately by respondents from all departments and agencies.



Where do we want to be?
The department has set a target of 80% for the results of the 2011 survey (to be reported in the fiscal year the results first become available). The target was originally set in the 2007-08 business plan based on the 2004 survey results and may be considered a minimum level that the department would like to achieve in the 2011 survey.

Outcome - Knowledgeable Staff

Measure 8 - Percent of Employees That Somewhat Agree or Strongly Agree That They Have Access to Training Opportunities

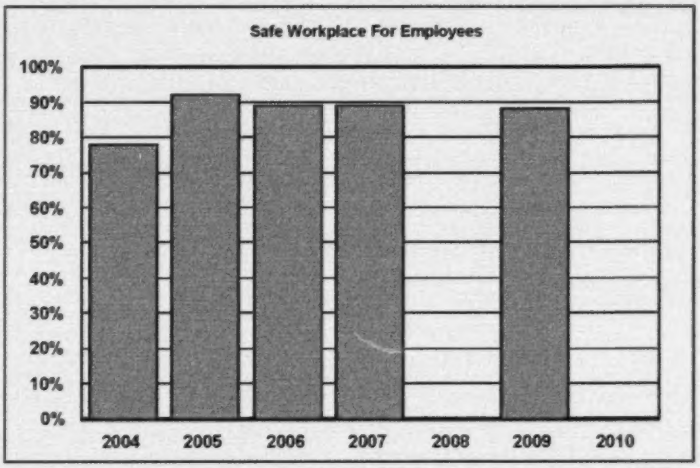
The Public Service Commission surveys employees of the Nova Scotia Government on a regular basis. One of the questions in the How's Work Going survey asks whether the employee has access to training opportunities.

What does the measure tell us?

This measure reports the estimated percentage of the department's employees (based on the survey results) that gave a favourable response to the question (either they somewhat agreed or they strongly agreed that they have access to training opportunities).

Where are we now?

The latest survey was administered in March 2009 (no survey was done in 2008 or 2010). The department's result for this question, from the 2009 survey, was 83%, down three percentage points from the 86% achieved in the March 2007 survey. The 83% result was six percentage points higher than the 77% achieved corporately by respondents from all departments and agencies.



Where do we want to be?

The department has set a target of 77% for the results of the 2011 survey (to be reported in the fiscal year the results first become available). The target was originally set in the 2007-08 business plan based on the 2004 survey results and may be considered a minimum level that the department would like to achieve in the 2011 survey.